



BACK-SIDE WAFER SINGULATION METHOD

Thomas P. Glenn Roy Dale Hollaway Steven Webster

5 ABSTRACT

10

15

A wafer includes a vertical scribe line and a horizontal scribe line on a front-side surface of the wafer. An intersection of the vertical scribe line and the horizontal scribe line is optically recognized through a wafer support attached to the front-side surface of the wafer. The wafer is drilled all the way through at the intersection to form a back-side alignment mark on a back-side surface of said wafer. The back-side alignment mark is used to aligning a saw, which singulates the wafer from the back-side surface.